

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

SUBJECT: Rhinehart Tire Fire Superfund Site
Preliminary Memo Regarding Removal of Sediments

DATE: 8/21/00

FROM: Peter Schaul, Chief
Remedial Branch



TO: File

EPA Region 3 is issuing a Proposed Plan in August 2000 for Operable Unit 3 of the Rhinehart Tire Fire Superfund Site (Site) which indicates that our preferred alternative includes removal of sediment in Rhinehart's Pond and Massey Run. It is our intent to issue a Record of Decision in Fiscal Year 2000 to address remediation of the sediment. The purpose of this memorandum is to meet the requirements stated in the undated memorandum from Stephen Luftig, Director of the Office of Emergency and Remedial Response and Barry Breen, Director of the Office of Site Remediation Enforcement titled Implementing FY2000 Appropriations Report Language on Sediment Dredging. The memorandum requires that the regional office supply information on the following five areas:

- consideration of alternatives to dredging,
- assessment of whether there is an appropriate/available/identified disposal site,
- information on the short-term effectiveness analysis,
- summary discussions with the community on a description of the alternatives considered, and
- a summary of the substantial threat that supports a dredging decision.

A brief description of the Site is necessary before discussing the five areas listed above. A fire occurred at the Site in October 1983, burning five to seven million tires. An emergency removal action and two remedial actions were undertaken to address the immediate threats to human health and the environment. The remaining threats are attributable to the sediment in Rhinehart's Pond and Massey Run. Rhinehart's Pond was created when the owner placed a dam in the headwaters area of what is now referred to as Massey Run. According to a conversation with Mr. Richard Norris, the EPA Headquarters central point of contact for sediment dredging, the issue of sediment dredging does not apply to the sediment in Rhinehart's Pond because it was artificially created. As such, the discussion on the five areas required in the above referenced memorandum addresses only the sediment in Massey Run.

Consideration of alternatives to dredging

The preferred alternative includes removing approximately 15 cubic yards of sediment in the first 150 feet of Massey Run. Removal is the only viable option for the sediment because of the type of contaminant present and the size of the creek. Because zinc is the risk driver in the sediment, treatment in-place is not a viable option. Although capping was developed as an alternative for the sediment in Rhinehart's Pond, it is not a viable alternative for Massey Run because the creek is approximately three feet wide at most in the area of sediment removal. Capping the sediment in the creek would effectively fill it in.

Assessment of whether there is an appropriate/available/identified disposal site

Samples of the sediment taken in May 2000 have determined that the sediment is non-hazardous. Therefore, disposal of the sediment would be in a Subtitle D landfill. The following three available landfills in close proximity to the Site have been identified:

- 1) USA Waste, Charles City Virginia (east of Richmond)
- 2) BFI - King and Queen Sanitary Landfill (also, east of Richmond, VA)
- 3) BFI - Old Dominion Sanitary Landfill (located in Richmond, VA)

Information on the short-term effectiveness analysis

Removal of the sediment in Massey Run would be accomplished by placing a small earthen dam at the upgradient end and routing the water around this area. The area where the sediment would be removed is accessed easily because of the previous work performed at the Site. In addition, there is a natural flat area adjacent to the creek which would provide access for equipment to that area to remove the sediment.

Summary of discussions with the community on a description of the alternatives considered

The community will be notified of EPA's preferred action when the Proposed Plan is issued. An ad will be placed in the two local newspapers, the Proposed Plan will be placed in the Administrative Record File in both the local and regional repositories, the public will be given a 30-day public comment period, and a public meeting will be held during the 30-day public comment period. Comments and questions submitted to the regional office during the 30-day public comment period and those brought up at the public meeting will be addressed in the Responsiveness Summary, which is a part of the Record of Decision. Further information regarding this item will be added to the record once the public comment period is closed.

A summary of the substantial threat that supports a dredging decision

An ecological risk assessment performed by the EPA Environmental Response Team shows that zinc in the sediment above 1,600 mg/kg poses adverse effects to the aquatic organisms in the creek. The preferred alternative includes removing the sediment in the first 150 feet of Massey Run which sampling has shown to exceed 1,600 mg/kg of zinc.